



Blackfeet Child Asthma and Healthy Homes Partnership

March 2009

Overview

The Blackfeet Child Asthma and Healthy Homes Partnership brings together Blackfeet Community College (BCC), Blackfeet Community Hospital (IHS), Blackfeet Housing and the University of Montana (UM) to alleviate child asthma through a variety of capacity-building strategies, including health education, student research, clinical treatment and indoor environmental quality improvements. An asthma intervention pilot project is the core activity currently being planned.

The Healthy Homes Partnership uses a community-based participatory research (CBPR) approach, which integrally involves the community in all aspects of the research and ensures information obtained can be used to improve the lives of the Blackfeet Tribal members. The Partnership seeks to build lasting relationships and improve Tribal capacity to address housing-related environmental health concerns and asthma triggers. Involving Blackfeet Community College students in healthy homes research is one way we are building capacity. We are also facilitating collaboration with the Blackfeet Head Start Program and Low Income Energy Assistance Program.

The project received formal endorsement of the Blackfeet Tribal Business Council in June 2008. The project currently receives National Institutes of Health (NIH) funding provided by the Center for Native Health Partnerships (CNHP) at Montana State University (MSU).

Background

Longstanding community concern about toxic mold and other contaminants in housing on the Blackfeet Reservation led to a preliminary study in 2007 conducted by UM students under the supervision of UM Professor Robin Saha and with the approval of former Blackfeet Tribal Councilwoman Betty Cooper. The study included mold sampling and a health survey of 36 wood-foundation homes and 152 residents. The study found medium or high levels of *Stachybotrys* ("black mold") in over one-third of the homes (36%) and a child asthma prevalence rate of 25%, which is more than two times greater than the national rate of 9.6% for American Indians and Alaskan Natives. The adult asthma rate in the homes was 17%, more than twice the national rate for American Indians (7.4%).

In the past, the Blackfeet Community Hospital has run a children's asthma clinic, which provided clinical treatment along with health education for parents and children. The Blackfeet Healthy Homes Project seeks to build on the previous asthma clinic by considering the role of bio-contaminants as a potential contributor to child asthma, by developing a housing intervention, and by providing health education in the home.

Current and Recent Activities

The recent emphasis has been on developing an asthma intervention (see below), providing indoor air quality training to BCC students, facilitating student research, conducting community outreach and

education, and developing a community advisory committee. Partners have presented to Tribal Council and given public lectures, one of which was carried on community access cable. In July 2008, we had a Healthy Homes Booth at Indian Days in Browning with the MSU Housing & Environmental Health Program and Women's Voices for the Earth (WVE) Safe Cleaning Products Initiative. Our advisory committee has met twice to date. We are currently modifying respiratory health measure instruments and housing assessment checklists in order to adapt them to the Blackfeet culture. These will be used for our planned intervention.

Planned Intervention

The planned asthma intervention seeks to improve the health and lives of Blackfeet children who have asthma by providing health education in the home, by making improvements to the indoor environment and by reducing indoor environmental triggers of asthma of 5-6 selected non-smoking homes of Blackfeet families. Pre- and post-intervention respiratory health measures (clinical exams) and quality of life surveys will be employed along with pre- and post-housing assessments. Home visits are planned to deliver health education and gather quality of life data. The intervention will be supported by clinical evaluation and treatment.

Anticipated Outcomes

Anticipated outcomes include improvement in health and quality of life of participating children and their families, improved health service delivery, development of Blackfeet-specific asthma protocols, implementation of better building practices, development of community housing priorities, obtaining additional housing and health resources, and future policy development.

Community Partners:

Sharon Wagner, IHS Health Educator
Brian Crawford, IHS Sanitarian/Safety Officer
Bev Atwell, Blackfeet Community College, NSF PIITA
Mike McKay, Blackfeet Community College, NSF PIITA
Robin Bird, Harley DeCarlo and Paul Augare, Blackfeet Housing

Collaborating Partner:

Professor Robin Saha, University of Montana, Environmental Studies Program and School of Public Health and Community Health Sciences

Healthy Homes Partnership Advisory Committee

Councilman Henry Butterfly, Health and Social Services Committee
Vicki Connelly, Blackfeet Low-income Energy Assistance Program (LEAP)
Charlene Harrison, Nurse, Browning Schools and Glacier Homes Resident
Brenda Olsen, Blackfeet Head Start Health Coordinator
Janice Coburn, Browning Community Development Corporation
Mary Ellen LaFromboise, Blackfeet Tribal Health Department
Blackfeet Community College, Native American Career and Technical Education Program (NACTEP)
(invited)

Collaborating and Community Partner Primary Contacts

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